



Patent

Docket No. 070702008320

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Horst HAUSSECKER et al.

Serial No.: 10/685,867

Filing Date: October 14, 2003

For: MODEL-BASED FUSION OF
SCANNING PROBE MICROSCOPIC
IMAGES FOR DETECTION AND
IDENTIFICATION OF MOLECULAR
STRUCTURES

Examiner: B. Q. Le

Group Art Unit: 2624

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO/SB/08a/b. Copies of the foreign documents and non-patent literature documents are also submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted after receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance. A fee is required.

Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission.

02/20/2007 JAD001 00000007 031952 10685867
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PTO/SB/17 (07-06)
Approved for use through 01/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).		Complete if Known	
FEE TRANSMITTAL For FY 2006		Application Number	10/685,867
		Filing Date	October 14, 2003
		First Named Inventor	Horst HAUSSECKER
		Examiner Name	B. Q. Le
		Art Unit	2624
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27	Attorney Docket No.	070702008320	
TOTAL AMOUNT OF PAYMENT (\$) 180.00			

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 03-1952 Deposit Account Name: Morrison & Foerster LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)** **Multiple Dependent Claims**

_____ - 20 = _____ x _____ = _____ **Fee (\$)** **Fee Paid (\$)**

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

_____ - 3 = _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____ / 50 _____ (round up to a whole number) x _____ = _____		

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement **180.00**

SUBMITTED BY			
Signature		Registration No. (Attorney/Agent)	42,465
Name (Print/Type)	Raj S. Dave	Telephone	(703) 760-7755
		Date	February 16, 2007



PTO/SB/21 (09-06)

Approved for use through 03/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/685,867
	Filing Date	October 14, 2003
	First Named Inventor	Horst HAUSSECKER
	Art Unit	2624
	Examiner Name	B. Q. Le
Total Number of Pages in This Submission	Attorney Docket Number	070702008320

ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Form PTO SB/08a/b (3 pages) IDS Citations (30 Refs) Return Receipt Postcard
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	MORRISON & FOERSTER LLP		
Signature			
Printed name	Raj S. Dave		
Date	February 16, 2007	Reg. No.	42,465

Applicants would appreciate the Examiner initialing and returning the Form PTO/SB/08a/b, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petition and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **070702008320**.

Dated: February 16, 2007

Respectfully submitted,

By  #45,678

Raj S. Dave

Registration No.: 42,465
MORRISON & FOERSTER LLP
1650 Tysons Blvd, Suite 300
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ALTERNATIVE TO PTO/SB/08A/B (09/06)

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/685,867
				Filing Date	October 14, 2003
				First Named Inventor	Horst HAUSSECKER
				Art Unit	2624
				Examiner Name	B. Q. Le
Sheet	1	of	3	Attorney Docket Number	070702008320

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1.	4,683,195	07-1987	MULLIS	
	2.	4,683,202	07-1987	MULLIS	
	3.	4,800,159	01-1989	MULLIS	
	4.	5,405,766	04-1995	KALLURY	
	5.	5,603,872	02-1997	MARGALIT	
	6.	5,610,287	03-1997	NIKIFOROV	
	7.	5,621,210	04-1997	LINDSAY	
	8.	5,776,674	07-1998	ULMER	
	9.	5,840,862	11-1998	BENSIMON et al.	
	10.	5,986,076	11-1999	ROTHSCHILD	
	11.	6,013,456	01-2000	KHAVAN-TAFTI	
	12.	6,054,327	04-2000	BENSIMON et al.	
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	16.	6,187,823	02-2001	HADDON	
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	22.	6,283,812	09-2001	JIN	
	23.	6,303,296	10-2001	BENSIMON et al.	
	24.	6,344,319	02-2002	BENSIMON et al.	
	25.	6,358,375	03-2002	SCHWOB	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	26.	EP-0-404-682-A	12-27-1990	FOURMENTIN-GUILBERT	Translation of Abstract	
	27.	EP-0732-584-A	09-18-1996	INTERNATIONAL BUSINESS MACHINES CORP		
	28.	WO 01/61330	08-23-2001	YEDA RESEARCH AND DEVELOPMENT CO. LTD.		

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
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				Art Unit	2624
				Examiner Name	B. Q. Le
Sheet	2	of	3	Attorney Docket Number	070702008320

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	29.	Grand et al. (1996). "Exptaxial Growth of Copper Phtalocyanin Monolayers on Ag(111)," <i>Surface Science</i> 366(3):403-414		
	30.	Berger & Kimmel, <i>Guide to Molecular Cloning Techniques</i> Academic Press, New York, NY. 1987		
	31.	Sambrook, et al, <i>Molecular Cloning: A Laboratory Manual</i> 2 nd Ed. Cold Spring Harbor Press, Cold Spring Harbor, NY. 1989		
	32.	<i>Protein Purification</i> (1987). Scopes ed.; Springer-Verlag, New York, NY		
	33.	<i>Methods in Molecular Biology: Protein Purification Protocols Vol 59</i> (1996). Doonan ed.; Humana Press, Totowa, NJ		
	34.	Creighton (1984). <i>Proteins: Structures and Molecular Properties</i> Ch. 5.; W.H. Freeman ed.; New York, NY		
	35.	Ramachandran et al. (1968). <i>Adv. Protein Chem.</i> 23:283-437		
	36.	Lee and Meisel, (1982): "Adsorption and Surface-Enhanced raman of Dyes on Silver and Gold Coils," <i>J. Phys. Chem.</i> 86:3391-3395		
	37.	Feldheim, "Assembly of metal nanoparticle arrays using molecular bridges," The Electrochemical Society Interface, Fall, 2001, pp. 22-25.		
	38.	Parker et al. (1991). " High Yield Synthesis, Separation, and Mass-Spectrometric Characterization of Fullerenes C ₆₀ to C ₂₆₆ ," <i>J.A. Chem. Soc.</i> 113:7499-7503		
	39.	Schoenfeld et al. (1995). Proc. 7 th 1 st int. Conf. on Modulated Semiconductor Structures, Madrid, 605-608		
	40.	Maivald et al. (1991). "Using Force Modulation to Image Surface Elasticities with the Atomic Force Microscope," <i>Nanotechnology</i> 2:103		
	41.	Chou & Fasman (1978). <i>Adv. Enzymol.</i> 47:45-148		
	42.	Bensimon, et al. (1995). "Stretching DNA with a Receding Meniscus: Experiments and Models," <i>Physical Review Letters</i> 74(23):4754-4757		
	43.	Michalet et al. (1997). "Dynamic Molecular Combing: Stretching the Whole Human Genome for High-Resolution Studies," <i>Science</i> 277:1518-1523		
	44.	Herrick et al. (2000). "Quantifying Single Genre Copy Number by Measuring Fluorescent Probe Lengths on Combed Genomic DNA," <i>PNAS</i> 97(1):222-227		
	45.	Kotler et al. (1993). "DNA Sequencing: Modular Primers Assembled from a Library of Hexamers or Pentamers," <i>Proc. Natl. Acad. Sci.</i> 90:4241-4245		
	46.	Kaczorowski et al. (1996) "Co-Operativity of Hexamer Litigation," <i>Gene</i> 179:189-193		
	47.	Holmstrom et al. (1993). "A Highly Sensitive and Fast Nonradioactive Method for Detection of Polymerase Chain Reaction Products," <i>Anal. Biochem.</i> 209:278-283		
	48.	Running et al. (1990). "A Procedure for Productive Coupling of Synthetic		

Examiner Signature		Date Considered	
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Sheet	3	of	3	Attorney Docket Number	070702008320

		Oligonucleotides to Polystyrene Microtiter Wells for Hybridization Capture," <i>BioTechniques</i> 8(3):276-277	
	49.	Newton et al. (1993). "The Production of PCR Products with 5' Single-Stranded Tails Using Primers That Incorporate Novel Phosphoramidite Intermediates," <i>Nucleic Acids Res.</i> 21(5):1155-1162	
	50.	Rasmussen et al. (1991). "Covalent Immobilization of DNA onto Polystyrene Microwells: The Molecules Are Only Bound at the 5' End," <i>Anal. Biochem.</i> 198:138-142	
	51.	Han et al. (2001). Quantum-Dot-Tagged Microbeads for Multiplexed Optical Coding of Biomolecules," <i>Nature Biotech.</i> 19:631-635	
	52.	Cunin et al. (2002). "Biomolecular Screening with Encoded Porous-Silicon Photonic Crystals," <i>Nature Materials</i> 1:39-41	
	53.	Hansma et al. (1996). "DNA Binding to Mica Correlates with Cationic Radius: Assay by Atomic Force Microscopy," <i>Biophys J.</i> 70:1933	
	54.	Lyubchenko et al. (1997). "Visualization of Supercoiled DNA with Atomic Force Microscopy in Situ," <i>PNAS</i> 94:496-501	
	55.	Kasas et al. (1997). "Escherichia coli RNA Polymerase Activity Observed Using Atomic Force Microscopy," <i>Biochemistry</i> 36:461	
	56.	Anderson et al. (2000). "Fabrication of Topologically Complex Three-Dimensional Microfluidic Systems in PDMS by Rapid Prototyping," <i>Anal. Chem.</i> 72:3158-3164,	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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